

Attorney's Docket No.: 07402-039001

electrical and mechanical interconnection between said semiconductor die and said external structure;

a plurality of silver migration regions in the first conductive contact extending from the silver epoxy bond toward the surface of said semiconductor die; and

an insulating island interposed between said silver migration regions and the surface of said semiconductor die,

wherein the first conductive contact is in contact with the surface of said semiconductor die in a region adjacent the insulating island.

5. (Amended) A semiconductor interconnection system, comprising:

a semiconductor die;

first and second conductive contacts, said first conductive contact coupled to a surface of said semiconductor die, and said second conductive contact coupled to an external structure;

a silver epoxy bond interposed between said first and second conductive contacts, said epoxy bond providing electrical and mechanical interconnection between said semiconductor die and said external structure; and

an insulating island configured to prevent migration of silver from said silver epoxy bond to said semiconductor die through said first conductive contact; and

a conductive electrode heavily doped with p-type material at the surface of said semiconductor die to provide electrical connection between said semiconductor die and said external structure.

Attorney's Docket No.: 07402-039001

9. (Twice Amended) A semiconductor flip-chip,  
comprising:

a semiconductor die having a plurality of conductive contacts;

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a plurality of epoxy bonds having a metallic component, said epoxy bonds configured to provide interconnection between said semiconductor die and an external structure, said plurality of epoxy bonds selectively applied to said plurality of conductive contacts on said semiconductor die and corresponding conductive contacts on the external structure;

a plurality of metallic component migration regions in each of said plurality of conductive contacts; and

an insulating island corresponding to each of the plurality of epoxy bonds, each insulating island [coupled to] interposed between one of said plurality of conductive contacts and a surface of the semiconductor die,

wherein each of said plurality of conductive contacts is in contact with the surface of the semiconductor die in a region adjacent the corresponding insulating island. --

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[Please add new claim 18.]

--18. (New) The system of claim 1, wherein the first conductive contact is in contact with the surface of said semiconductor die in a region surrounding the insulating island.--